

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/economy

3M Company 3M Center Bldg. 235-28-27 St. Paul, MN 55144

Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Component Approval - 3MTM Series "Ultra S400" and "Ultra Prestige PR-S50" Safety & Security Storm Protection Window Film System – S.M.I.

APPROVAL DOCUMENT: Drawing No. 11-777, titled "3M Storm Protection Window Film System," sheets 1 and 2 of 2, dated 04/28/11, prepared by E.C. & Associates, Inc., signed and sealed by Emilio Castro, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises and replaces NOA# 11-0302.02 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by Manuel Perez, P.E.

(MIAMI-DADE COUNTY) APPROYED M/12/12/13

NOA No. 13-1022.03 Expiration Date: August 25, 2016 Approval Date: December 19, 2013

Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

- 1. Manufacturer's die drawings and sections.
- 2. Drawing No. 11-777, titled "3M Storm Protection Window Film System" Sheets 1 and 2 of 2, dated 04/28/11, prepared by E.C. & Associates, Inc., signed and sealed by Emilio Castro, P.E. (Submitted under previous NOA# 11-0302.02)

B. TESTS

- 1. Test report No. ATI-C3749.02-106-18, prepared by Architectural Testing, Inc. dated 10/18/13, issued to 3M Company for their 3M Ultra S400 and 3M Ultra Prestige PR-S50 plastic film material per ASTM G 155-04 "Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials" and ASTM D638-03 "Standard Test Method for Tensile Properties of Plastics", signed and sealed by Gary T. Hartman, P.E.
- 2. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 2) Small Missile Impact Test per FBC, TAS 201-94
 - 3) Large Missile Impact Test per FBC, ASTM E 1996
 - 4) Cyclic Wind Pressure Loading per FBC, ASTM E 1886 along with marked-up drawings and installation diagram of an aluminum fixed window with ¼" tempered glass with 3MTM Ultra S400 Safety & Security Window Film with 3MTM Impact Protection Adhesive (Black) attachment system, prepared by Architectural Testing, Inc., Test Report No. ATI-A4056.01-201-44, dated 10/12/10, signed and sealed by Joseph A. Reed, P.E.

(Submitted under previous NOA# 11-0302.02)

- 3. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 2) Small Missile Impact Test per FBC, TAS 201-94
 - 3) Large Missile Impact Test per FBC, ASTM E 1996
 - 4) Cyclic Wind Pressure Loading per FBC, ASTM E 1886 along with marked-up drawings and installation diagram of an aluminum fixed window with ¼" tempered glass with 3M[™] Prestige PR-S50 Tinted Safety & Security Window Film with 3M[™] Impact Protection Adhesive (Black) attachment system, prepared by Architectural Testing, Inc., Test Report No. ATI-A4057.01-201-44, dated 10/12/10, signed and sealed by Joseph A. Reed, P.E. (Submitted under previous NOA# 11-0302.02)
- 4. Test report No.USTC-114257-2, prepared by United States Testing Company, Inc., dated 03/29/95, issued to 3M Company, for their 3MTM ScotchshieldTM Film SCLARL 400 (ULTRA S400) plastic per ASTM E84-05 "Standard Test Method for Surface Burning Characteristics of Building Materials", covering two parameters: Flame Spread and Smoke Developed values, signed by Steve Caldarola, Senior Supervisor Fire Technology and John Lomash, Vice President.

(Submitted under previous NOA# 11-0302.02)

Manuel Perez, P.E.
Product Control Examiner
NOA No. 13-1022.03
Expiration Date: August 25, 2016

Approval Date: December 19, 2013

3M Company

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS (CONTINUED)

5. Test report No.ETL-3111130SAT-001, prepared by Intertek - ETL - Semko, Intertek Testing Services, Inc., dated 12/28/06, issued to 3M Company, for their Ultra PR S50 plastic per ASTM E84-05 "Standard Test Method for Surface Burning Characteristics of Building Materials", covering two parameters: Flame Spread Index and Smoke Developed Index, signed by Teodoro Alvarado Jr., E84 Operator and C. Anthony Peñaloca, Flammability Testing Team Leader. (Submitted under previous NOA# 11-0302.02)

C. CALCULATIONS:

- 1. None.
- 2. Glazing complies with ASTM E1300-04.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

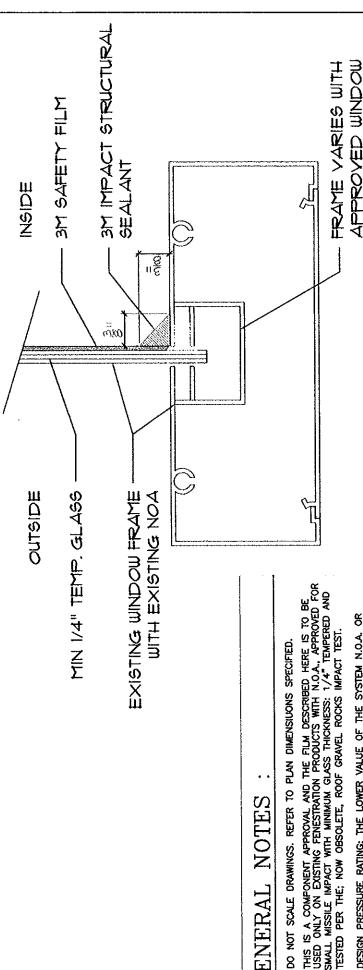
1. Statement letter of conformance and no financial interest, 08/05/11, signed and sealed by Emilio Castro, P.E. (Submitted under previous NOA# 11-0302.02)

G. OTHERS

1. Notice of Acceptance No. 11–0302.02, issued to 3M Company for their Component Approval - Series "Ultra S400" and "Ultra Prestige PR-S50" Safety and Security Storm Protection Window Film System – S.M.I., approved on 08/25/11 and expiring on 08/25/16.

Manuel Perez, P.E. Product Control Examiner NOA No. 13-1022.03

Expiration Date: August 25, 2016 Approval Date: December 19, 2013



GENERAL NOTES

- THIS IS A COMPONENT APPROVAL AND THE FILM DESCRIBED HERE IS TO BE USED ONLY ON EXISTING FENESTRATION PRODUCTS WITH N.O.A., APPROVED FOR SMALL MISSILE IMPACT WITH MINIMUM GLASS THICKNESS: 1/4" TEMPERED AND TESTED PER THE; NOW OBSOLETE, ROOF GRAVEL ROCKS IMPACT TEST.
- DESIGN PRESSURE RATING: THE LOWER VALUE OF THE SYSTEM N.O.A. OR THIS COMPONENT NOA SHALL GOVERN. ri
- DESIGN LOAD: THE DESIGN LOADS MUST BE CALCULATED BY A PROFFESIONAL ARCHITECT OR ENGINEER FOR EACH SPECIFIC PROJECT. THE CALCULATED DESIGN LOADS OR PRESSURE REQUIREMENT MUST NOT EXCEED THAT ALLOWABLE WINDOW DESIGN PRESSURE RATING.
- COMPLIES WITH THE FLORIDA BUILDING CODE 2007

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- FASTENERS: ASSEMBLY ANCHORS SHALL BE AS SPECIFIED IN THE SYSTEM N.O.A. ဖ
- USE: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, ARCHITECT OR ENGINEER OF RECORD TO VERIFY THE FOLLOWING:

 7.1 THE SITE SPECIFIC PROJECT CRITERIA, SUCH AS BUT NOT LIMITED TO
- LOCAL CODE REQUIREMENTS, PRESSURE REQUIREMENTS, THAT APPROVAL IS ADEQUATE TO SPECIFIC PROJECT. AN EVALUATION OF THE EXISTING STRUCTURE AND ACHORING CONDITION. 7.2
- SMALL MISSILE IMPACT RATING: WIND-BORNE DEBRIS PROTECTION (SHUTTERS) ARE NOT REQUIRED FOR THE INSTALLATIONS ABOVE 30 FEET ABOVE GRADE. ထ
- INSTALLATION CAN ONLY BE PREFORMED BY A 3M APPROVED COMPLIANCE DEALER" CODE "CERTIFED တ်

GLAZING DETAIL SCALE: 1/4" = 1'-0

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as complying with the Meride By W//WW.t.t. Acceptance No 13-1090 PRODUCT REVISED Expiration Date AUG Building Code

Approved as complying with the Miami Bade Product Control Plerida Buiding Code
Date N.X. 25 2011
NOA# 11-0302.0



By Maurel dry

PRODUCT APPROVAL FOR:

3M STORM PROTECTION WINDOW FILM SYSTEM 3M Company 3M Center - Bldg 235-25-27

3M Center, Bidg 235, E-330-3D-02 St. Paul, MN 55144-1000 3M Renewable Energy Div. **DFFICE (851) 733-5460** -AX (651) 736-2007

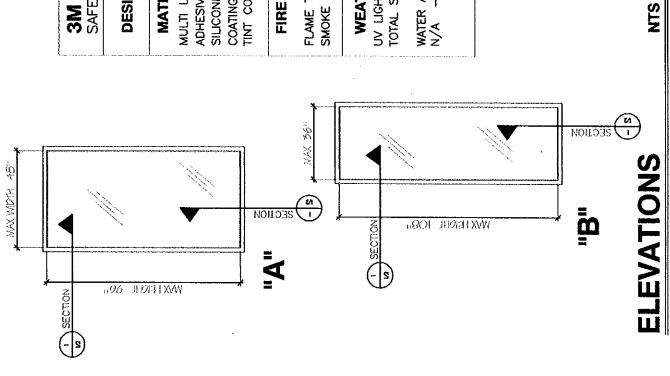


14811 SW 9th LANE MIAMI, FL. 33194 OFF. (305) 480-7884 FAX (305) 480-7886 E.C. & ASSOCIATES, INC. EMILIO CASTRO P.E. CONSULTING CIVIL & STRUCTURAL

ENGINEERS #EB 0006576

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St. Paul, MN 55144



3M Ultra Prestige PR-S50 SAFETY & SECURITY WINDOW FILM	3M ULTRA S400 SAFETY & SECURITY WINDOW FILM
DESIGN PRESSURE RATING +/- 70 PSF	DESIGN PRESSURE RATING +/- 70 PSF
MATERIAL PROPERTIES: MULTI LAYERED METALIZED OPTICAL FILM— 65—75 % ADHESIVES— SILICONE COATED PET LINER— COATINGS— 10—15 % TINT COATING— 2—3 %	MATERIAL PROPERTIES: MULTI LAYERED METALIZED OPTICAL FILM— 65-75 % ADHESIVES- SILICONE COATED PET LINER- COATINGS- 10-5 %
FIRE TEST PROPERTIES:	FIRE TEST PROPERTIES:
FLAME TEST INDEX— 10 SMOKE DEVELOPED INDEX— 55	FLAME TEST INDEX— 0 SMOKE DEVELOPED INDEX— 10
WEATHERING TEST PROPERTIES: UV LIGHT REJECTED — 98% TOTAL SOLAR ENERGY REJECTED — 43%	WEATHERING TEST PROPERTIES: UV LIGHT REJECTED — 98% TOTAL SOLAR ENERGY REJECTED — 17%
WATER AND WIND TEST PROPERTIES N/A — FILM AND SILICONE SEALANT ARE INST. ON INSIDE OF GLASS AND ARE NOT EXPOSED TO OUTDOOR ELEMENTS	WATER AND WIND TEST PROPERTIES N/A — FILM AND SILICONE SEALANT ARE INST. ON INSIDE OF GLASS AND ARE NOT EXPOSED TO OUTDOOR ELEMENTS

as complying with the Florida Bailding Code By Walled Re NOA# 11-030 Plorida Badding Co Expiration Date Acceptance No Date AUG.

PRODUCT REVISED

Approved as complying with the

PRODUCT APPROVAL FOR:

3M Renewable Energy Div. 3M Center, Bldg 235, E-330-30-20 St. Paul, MN 55144-1000 OFFICE (651) 738-500 FAX (651) 738-2007



E.C. & ASSOCIATES, INC.
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Sheet No. 2/2

am STORM PROTECTION WINDOW FILM SYSTEM 3M Company 3M Center - Bidg 235-25-27 St. Paul, MN 55144